

39. A modified cellulase of claim 37, wherein the mutation comprises a substitution, insertion or deletion at position 24.
40. A modified cellulase of claim 37, wherein the mutation comprises a substitution, insertion or deletion at position 32.
41. A modified cellulase of claim 37, wherein the mutation comprises a substitution, insertion or deletion at position 34.
42. A modified cellulase of claim 37, wherein the mutation comprises a substitution, insertion or deletion at position 42.
43. A modified cellulase of claim 37, wherein the mutation comprises a substitution, insertion or deletion at position 49.
44. A modified cellulase of claim 37, wherein the mutation comprises a substitution, insertion or deletion at position 50.
45. A modified cellulase of claim 37, wherein the mutation comprises a substitution, insertion or deletion at position 53.
46. A modified cellulase of claim 37, wherein the mutation comprises a substitution, insertion or deletion at position 54.
47. A modified cellulase of claim 37, wherein the mutation comprises a substitution, insertion or deletion at position 64.
48. A modified cellulase of claim 37, wherein the mutation comprises a substitution, insertion or deletion at position 68.

B1
Cont

49. A modified cellulase of claim 37, wherein the mutation comprises a substitution, insertion or deletion at position 69.
50. A modified cellulase of claim 37, wherein the mutation comprises a substitution, insertion or deletion at position 70.
51. A modified cellulase of claim 37, wherein the mutation comprises a substitution, insertion or deletion at position 71.
52. A modified cellulase of claim 37, wherein the mutation comprises a substitution, insertion or deletion at position 79.
53. A modified cellulase of claim 37, wherein the mutation comprises a substitution, insertion or deletion at position 85.
54. A modified cellulase of claim 37, wherein the mutation comprises a substitution, insertion or deletion at position 86.
55. A modified cellulase of claim 37, wherein the mutation comprises a substitution, insertion or deletion at position 88.
56. A modified cellulase of claim 37, wherein the mutation comprises a substitution, insertion or deletion at position 92.
57. A modified cellulase of claim 37, wherein the mutation comprises a substitution, insertion or deletion at position 93.
58. A modified cellulase of claim 37, wherein the mutation comprises a substitution, insertion or deletion at position 95j.

B'
cont

59. A modified cellulase of claim 37, wherein the mutation comprises a substitution, insertion or deletion at position 106.
60. A modified cellulase of claim 37, wherein the mutation comprises a substitution, insertion or deletion at position 138.
61. A modified cellulase of claim 37, wherein the mutation comprises a substitution, insertion or deletion at position 140.
62. A modified cellulase of claim 37, wherein the mutation comprises a substitution, insertion or deletion at position 150b.
63. A modified cellulase of claim 37, wherein the mutation comprises a substitution, insertion or deletion at position 152.
64. A modified cellulase of claim 37, wherein the mutation comprises a substitution, insertion or deletion at position 153.
65. A modified cellulase of claim 37, wherein the mutation comprises a substitution, insertion or deletion at position 166.
66. A modified cellulase of claim 37, wherein the mutation comprises a substitution, insertion or deletion at position 169.
67. A modified cellulase of claim 37, wherein the mutation comprises a substitution, insertion or deletion at position 170.
68. A modified cellulase of claim 37, wherein the mutation comprises a substitution, insertion or deletion at position 171.

B1
cont

69. A modified cellulase of claim 37, wherein the mutation comprises a substitution, insertion or deletion at position 172.
70. A modified cellulase of claim 37, wherein the mutation comprises a substitution, insertion or deletion at position 173.
71. A modified cellulase of claim 37, wherein the mutation comprises a substitution, insertion or deletion at position 174.
72. A modified cellulase of claim 37, wherein the mutation comprises a substitution, insertion or deletion at position 193.
73. A modified cellulase of claim 37, wherein the mutation comprises a substitution, insertion or deletion at position 197.
74. The cellulase variant of claim 37, wherein the cellulase has an amino acid sequence of SEQ ID NO:1.
75. The cellulase variant of claim 74, wherein the mutation comprises C16M+C86G, D42W, D42W, D42Y, E48D/P49*, E48N/P49* and/or L70Y.
76. A cellulase variant of claim 37, wherein the mutation comprises:
K13L or L13K;
P14A or A14P;
S15H or H15S;
K20E, K20G, K20A, E20K, G20K, A20K, E20G, E20A, G20E, A20E, G20A, or A20G;
K21N or N21K;
A22G, A22P, G22A, P22A, G22P, or P22G;
V24*, V24L, *24V, L24V, *24L, or L24*;
N32D, N32S, N32K, D32N, S32N, K32N, D32S, D32K, S32D, K32D, S32K, or K32S;
N34D or D34N;

Sub

G50N or N50G;
A53S, A53G, A53K, S53A, G53A, K53A, S53G, S53K, G53S, K53S, G53K, or K53G;
Y54F or F54Y;
V64I, V64D, I64V, D64V, I64D, or D64I;
F68V, F68L, F68T, F68P, V68F, L68F, T68F, P68F, V68L, V68T, V68P, L68V, T68V,
P68V, L68T, L68P, T68L, P68L, T68P, or P68T;
A69S, A69T, S69A, T69A, S69T, or T69S;
L70Y or Y70L;
G71A or A71G;
G79T or T79G;
W85T or T85W;
A88Q, A88G, A88R, Q88A, G88A, R88A, Q88G, Q88R, G88Q, R88Q, G88R, or R88G;
L92A or A92L;
T93Q, T93E, Q93T, E93T, Q93E, or E93Q;
V106F or F106V;
Q138E or E138Q;
G140N or N140G;
S152D or D152S;
R153K, R153L, R153A, K153R, L153R, A153R, K153L, K153A, L153K, A153K, L153A,
or A153L;
B1 cont
G166S or S166G;
W169F or F169W;
R170F or F170R;
F171Y, F171A, Y171F, A171F, Y171A, or A171Y;
D172E, D172S, E172D, S172D, E172S, or S172E;
W173E or E173W;
F174M, F174W, M174F, W174F, M174W, or W174M;
L193I or I193L; and/or
T197S or S197T.

77. A cellulase variant of claim 37, wherein as a result of the mutation,
- the amino acid residue at position 22 is A, G, or P;
 - the amino acid residue at position 24 is L, V, or *;
 - the amino acid residue at position 32 is D, K, N, or S;
 - the amino acid residue at position 34 is D or N;
 - the amino acid residue at position 42 is D, G, T, N, S, K, or *;
 - the amino acid residue at position 49 is P, S, A, G, or *;
 - the amino acid residue at position 49a is C or *;
 - the amino acid residue at position 49b is N or *;
 - the amino acid residue at position 50 is G or N;
 - the amino acid residue at position 53 is A, G, K, or S;
 - the amino acid residue at position 54 is F or Y;
 - the amino acid residue at position 64 is D, I, or V;
 - the amino acid residue at position 68 is D, N, P, or T;
 - the amino acid residue at position 69 is A, S, or T;
 - the amino acid residue at position 70 is L or Y;
 - the amino acid residue at position 71 is A or G;
 - the amino acid residue at position 79 is G or T;
 - the amino acid residue at position 88 is A, G, Q, or R;
 - the amino acid residue at position 92 is A or L;
 - the amino acid residue at position 93 is E, Q, or T;
 - the amino acid residue at position 95j is P or *;
 - the amino acid residue at position 106 is F or V;
 - the amino acid residue at position 138 is E or Q;
 - the amino acid residue at position 150b is A or *;
 - the amino acid residue at position 152 is D or S;
 - the amino acid residue at position 153 is A, K, L, or R;
 - the amino acid residue at position 166 is G or S;
 - the amino acid residue at position 169 is F or W;
 - the amino acid residue at position 170 is F or R;
 - the amino acid residue at position 171 is A, F, or Y;

the amino acid residue at position 172 is D, E, or S;
the amino acid residue at position 173 is E or W;
the amino acid residue at position 174 is F, M, or W;
the amino acid residue at position 193 is I or L; and/or
the amino acid residue at position 197 is S or T.

B1
cont

78. A detergent composition comprising a cellulase variant of claim 37 and a surfactant.
